

Air Force Research Laboratory AFRL

Science and Technology for Tomorrow's Air and Space Force

SUCCESS STORY

AFRL COMPLETES SUCCESSFUL SUPERSONIC DEMONSTRATION ENGINE TESTING



AFRL completed XTL17/I supersonic demonstrator engine testing at the Allison Advanced Development Company/Rolls-Royce Corporation test facility, Indianapolis, Indiana. This engine's specific thrust level is the highest ever produced by an expendable turbine engine, marking another first for the Integrated High-Performance Turbine Engine Technology (IHPTET) program.



Accomplishment

The AFRL team conducted the initial checkout of the XTL17/I supersonic demonstrator engine. During subsequent performance testing, the XTL17/I expendable turbine engine achieved a specific thrust 87% higher than the baseline defined for this engine class in the IHPTET program.

Background

The XTL17/I is part of the Joint Expendable Turbine Engine Concept portion of the IHPTET program, demonstrating expendable and limited-life engine technologies for applications such as cruise missiles. Demonstrations such as those involving the XTL17/I provide the warfighter with low-risk technology transition, resulting in a high level of readiness and increased safety and performance.

Propulsion
Support to the Warfighter
Air

Additional Information

To receive more information about this or other activities in the Air Force Research Laboratory, contact TECH CONNECT, AFRL/XPTC, (800) 203-645 I and you will be directed to the appropriate laboratory expert. (PR-S-06-02)